

ANNUAL REPORT FOR YEAR SEVEN  
(October 1, 2010 – July 14, 2011)

AND

ANNUAL IMPLEMENTATION PLAN FOR YEAR EIGHT  
(July 15, 2011 – July 14, 2012)

The Egyptian Antiquities Conservation Project (EAC)  
USAID Agreement No. 263-A-00-04-00018-00

Awarded to

THE AMERICAN RESEARCH CENTER IN EGYPT (ARCE)

Address: 8700 Crownhill Blvd. Suite 507, San Antonio, TX 78209 Tel: (210) 821-7000

by the

USAID Program Office of Productive Sector Development / Office of the Environment  
USAID / Egypt

December 2011

In collaboration with the United States Agency for International Development and the  
Egyptian Ministry of State for Antiquities



## TABLE OF CONTENTS

Executive Summary and Highlights of Progress for the Year

Introduction

Cycle One Projects – Table of Completed Projects

Cycle Two Projects – Table of Completed Projects

- Site Management Implementation
- Egyptian Museum Registrars Training

Cycle Three Projects – Table of Ongoing Projects

- Emergency Intervention – Luxor Temple
- Emergency Intervention – Karnak Temple
- Field School for Architectural Conservators
- Luxor Conservation Center (Lab)
- Groundwater and Structural Monitoring
- Sacred Lakes
- Signage
- Publication and Documentation

Cycle Four Projects – Table of Completed projects

Cycle Five Projects – Table of Ongoing Projects

- Documentation and Conservation at the Red Monastery, Sohag
- ARCE Field School (Giza)
- Shunet el-Zebib, Abydos
- St. Antony's Museum
- Site Management in Historic Cairo

EAC Budget; July 15, 2011 – July 14, 2012

Grant Modifications and Funding Table

## **TABLE OF FIGURES**

- Figure 1: Khonsu Temple West Wall and Column Conservation
- Figure 2: Chapel 2 Prototype (before)
- Figure 3: Chapel 2 Prototype (after)
- Figure 4: Euergetes Gate Completed Section of Wall Jamb
- Figure 5: Khonsu Temple Wall Patching
- Figure 6: Khonsu Temple Flooring (Main Court)
- Figure 7: Eastern Semidome, Red Monastery Church, Sohag
- Figure 8: Isometric drawing of the Red Monastery Church, Sohag
- Figure 9: Existing museum at St. Anthony's Monastery, Red Sea

## **APPENDICES**

1. Articles and Publications on ARCE projects
2. Training Completed Since Project Inception
3. Site visits and presentations on ARCE projects
4. Table of EAC Projects

## EXECUTIVE SUMMARY

This report covers the period July 15, 2010 through July 14, 2011 (Year 7 of the EAC Project).

The main activities during this period were as follows:

- Cycle One: All projects completed prior to Year 7
- Cycle Two: Completion of the Egyptian Museum Registrars Training project
- Cycle Three: Fourteen (14) projects and sub-grants conducted in the past year, including seven (7) which were completed by the end of Year 7. The work covered projects in both Karnak Temple and Luxor Temple, as well as the ARCE publication program.
- Cycle Four: All projects completed prior to Year 7
- Cycle Five: Continuation of five projects funded under Modification No. 6 to the USAID agreement, two of which are continued from previous funding cycles.
- Supervisory site visits by ARCE Management and Project review visits with officials from USAID
- Participation in ARCE's annual meeting, conferences, and lectures, to present project work done funded by USAID.
- Maintaining communication with the changing leadership at the Supreme Council of Antiquities throughout the recent period of political upheaval. Continuing to cooperate with the SCA to obtain permissions from the SCA Permanent Committee for ongoing conservation work.

## **INTRODUCTION**

This is the annual report for Year Seven and the implementation plan and budget for Year Eight of the Egyptian Antiquities Conservation (EAC) Project, Cooperative Agreement No. 263-A-00-04-00018-00, awarded to the American Research Center in Egypt (ARCE) by the United States Agency for Development (USAID) on July 15, 2004.

The goal of the EAC Project is to safeguard Egypt's cultural heritage and to promote tourism through the development of the Egyptian Supreme Council of Antiquities' (SCA) institutional capacity and the conservation of specific historic sites.

Since its inception in 2004, ARCE has successfully completed seventeen projects, and will continue to work on fourteen remaining projects until the project end date in July 2014.

For ease of reference, this report contains only ongoing project descriptions. Completed project descriptions may be found in Annex B of this document.

## **CYCLE ONE PROJECTS**

**October 1, 2004 – December 31, 2010**

The following four projects were approved by USAID in the EAC Cooperative Agreement for Cycle One subproject implementation, and scheduled to commence in Year One.

<b>Project Name</b>	<b>Grantee Name</b>	<b>Location</b>	<b>Start / End Date</b>	<b>Status</b>	<b>Total Budget (LE)</b>	<b>Total Spent (LE)</b>
Field School for SCA Inspectors	Ancient Egypt Research Associates, Inc. (AERA)	Giza Plateau	Dec-06 / July 2009	Extended 3 more years - 100% completed *	1,926,088	3,711,479
Marina El-Alamein Site Presentation	Agnieszka Dobrowolska	Mediterranean Coast	Jun-05 / --	Expanded and later suspended	1,883,065	2,499,840
Conservation and Display of Early Cells at St. Anthony's Monastery	Fr. Maximous al-Anthony	Red Sea Coast	May-06 / Dec-10	100% completed	607,410	360,800
Test Cleanings of Roman Wall Paintings In Luxor Temple	Luigi De Cesaris & Alberto Sucato, Restorers	Luxor	Nov 15-30 <sup>th</sup> '05	100% completed **	118,796	118,606

\* continued funding under Cycle 5

\*\* continued funding under Cycle 2

## **CYCLE TWO PROJECTS**

**October 1, 2005 – July 15, 2009**

Six Cycle Two projects were approved by USAID in EAC's Year Two plan:

<b>Project Name</b>	<b>Grantee Name</b>	<b>Location</b>	<b>Start / End Date</b>	<b>Status</b>	<b>Total Budget (LE)</b>	<b>Spent by Year 7</b>
---------------------	---------------------	-----------------	-------------------------	---------------	--------------------------	------------------------

Roman Wall Paintings Conservation in Luxor Temple	Luigi De Cesaris and Alberto Sucato, Restorers	Luxor	Oct. '06 – Dec. '08	100% completed	3,454,000	2,621,667
Conservation and Documentation of Wall Paintings at the Red Monastery	Dr. Elizabeth Bolman	Sohag	Sept. '06 to July '09	100% completed *	8,299,570	8,050,231
Conservation of the Mosque of Aslam al-Silahdar (Cairo)	Christophe Bouleau (ARCE in partnership with Aga Khan Cultural Services Egypt)	Cairo	May '06 to March '09	100% completed	3,134,566	3,453,705
Conservation and Documentation of the Tomb of Menna	Dr. Melinda Hartwig (Georgia State University)	Luxor	Feb '07 to Dec. '09	100% completed	1,668,050	1,931,444
Site Management Implementation	ARCE-Managed	Luxor	Oct. '06 – Dec. '12	Modified	2,174,618	569,203
Egyptian Museum Registrars Training	Dr. Janice Kamrin (ARCE-managed)	Cairo	Oct. '06 – Jan. '11	Extended and completed in Year 7	2,247,148	4,951,325

- CONTINUED FUNDING UNDER CYCLE 5

## **ARCE INSTITUTIONAL DEVELOPMENT PROJECTS**

### **SITE MANAGEMENT IMPLEMENTATION**

**Statement of the Project:** Under the EAP Post-Grant Conservation Program, ARCE funded a site management training project for SCA employees. This project focused on the present conditions and the opportunities for enhancement on the west bank at Luxor. Trainees were drawn from the SCA inspectors currently stationed at the regional inspectorates between Esna and Sohag. Part of the training program involved creating a management plan for the Medinet Habu temple complex.

Under the EAC Cycle Two program, the management plan for Medinet Habu produced under EAP was intended to be used to create specifications for a contract to be competitively awarded in Year Three for site improvements at Medinet Habu. By 2008 a project sponsored by the SCA had started to develop its own program at Medinet Habu with Dr. Neguib Amin and Dr. Wolfgang Mayer, of the Hans Seidel Foundation. Therefore, ARCE found no counterparts to implement the project as initially conceived. The scope of work was consequently reduced to creation of visitor information signage, in Arabic and English, which is in the development and review stage.

**Achieved Activities for Year Seven:** Texts for the signs were refined and edited in-house by Andrew Bednarsky and Michael Jones, and sent to Chicago House for further input. Progress was limited in Year Seven.

**Planned Activities for Year Eight:** ARCE plans to continue with in-house production of the Medinet Habu signs in English and Arabic. Ongoing development of texts and appropriate illustrations and plans is in collaboration with Chicago House.

**Total Amount Originally Budgeted for Site Management: 2,174,618**

**Total Site Management Expenditures through Year Seven: LE 569,203**

**Estimated Budget for Year Eight:** Unspent funds were reallocated to other projects. If content for the signs is completed in Year 8, cost for production and installation will included in the Year 9 budget.

## **EGYPTIAN MUSEUM REGISTRARS TRAINING**

**Statement of the Project:** The Egyptian Museum Registrars Training project was completed in Year 7. The four-year training program created and institutionalized a Registrations and Collections Management Department (RCMD) within the Egyptian Museum, which now serves as a model for the Museum Sector of Egypt's Supreme Council of Antiquities (SCA). The scope of work for the project originally envisioned four new registrars to be identified and trained in a manual and computerized collections management system to be developed during the project. Appropriate equipment and supplies were purchased, including computers, scanning and photography equipment, and furniture for the new office within the museum.

When the project began in 2004, a database was created for the project using the Filemaker application. Volunteers performed data entry of thousands of museum objects which, up until that time, were manually recorded in three separate registry books. The Filemaker database was used until the appropriate museum collections management software (and funding for its purchase) could be identified. In 2008, \$478,000 was provided by the Mellon Foundation for the acquisition of new KE Emu museum management software. In January 2009, the Filemaker data records were migrated to KE Emu. During the migration period, Dr. Kamrin and two other project team members who had received training on the new KE Emu software trained the rest of the team.

Over the first three years of the project, two-week seminars in museum collection management were provided on a quarterly basis to the newly-created registrars by ARCE's museum consultant Rachel Mauldin. Daily training and office oversight was carried out by Dr. Kamrin, the project director. As the project progressed, more registrar positions were created, and by the September 2009, nine staff were receiving training.

**Year 7 Results:** Eight registrars (all female) were awarded certificates of graduation at a ceremony held at the Supreme Council of Antiquities on September 20, 2010. Previously scheduled to end on October 31, 2010, the project was extended through January 31, 2011 to allow the ARCE team to continue in a supervisory role and to carry out further training for areas such as database administration. The new end date also corresponded with the end of the Andrew W. Mellon Foundation-funded Egyptian Museum Database Project (implemented by ARCE). The project implementation period ran concurrently and complementarily with multiple grants totaling \$527,400 that were awarded to ARCE by The Andrew W. Mellon Foundation, providing acquisition and support for the software used by the new RCMD. A request was sent to ARCE by the SCA to extend the project with additional funding from USAID. Based on this request ARCE submitted a proposal to USAID for a follow-on project at the museum, still pending approval.

**Total Budgeted for Egyptian Museum Registrars Training: LE 4,742,721**(LE 2,247,148 budgeted in Year 2 and project was later extended with additional cost)

**Total Project Expenditure: LE 4,951,325**

## **LUXOR GROUNDWATER LOWERING RESPONSE** **MODIFICATION No. 1 (CYCLE 3)**

**March 1, 2007 – July 14, 2014**

### **Introduction**

ARCE-managed projects under the Luxor East Bank Groundwater Lowering Response have five main deliverables:

1. A monitoring system;
2. A conservation program for the temples of Karnak, Mut and Luxor;
3. A training program for SCA conservators;
4. Establishment of a conservation center with laboratory, and
5. Documentation and publication of conservation activities.

**Project Implementation Schedule:** The period March 1 to September 30, 2007 was devoted to establishing the Luxor office, staff recruitment, project planning and mobilization. The original timeframe for project implementation (between October 1, 2007 and July 14, 2009) was not sufficient to complete the planned activities, once the mobilization period and needs assessments were completed. With USAID approval of ARCE's requested no-cost extension, on-site activity in Luxor was extended until 2013, allowing for demobilization and reporting in 2014.

This annual report covers the fourth season for the ARCE East Bank Groundwater Lowering Response program. The 2010-2011 conservation season and field school started in late September 2010. Planning and preparatory work on the site continued until July 14, 2011.

### **Cycle Three Program Descriptions**

The following projects were approved by USAID for Cycle Three subproject implementation, commencing in Year Three (2007).

	<b>Project Name</b>	<b>Principal Consultants</b>	<b>Location</b>	<b>Start / End Date</b>	<b>Status</b>	<b>Spent by Year 7</b>
A						
1	Emergency Conservation at Luxor Temple: <b>Roman Bastion</b>	Dr. Pamela Rose, ARCE	Luxor Temple, East Bank	Oct. 2009 – June 2010	Completed	LE 112,093
2	Emergency Conservation at Luxor Temple: <b>Pest Netting</b>	John Shearman, ARCE	Luxor Temple, East Bank	January - February 2010 February – March 2011	Completed Completed	LE 13,400
3	Emergency Conservation at Luxor Temple: <b>Salvage Archaeology Field School</b>	Dr. Mark Lehner, Ancient Egyptian Research Associates	Luxor Temple, East Bank	5 <sup>th</sup> : January - 27 <sup>th</sup> March 2008 9 <sup>th</sup> Jan – 15 <sup>th</sup> March '10 9 <sup>th</sup> April – 3 <sup>rd</sup> June, 2011	Completed Completed Completed	LE 2,477,526
4	Emergency Conservation at Luxor Temple: <b>Ramesses II Columns</b>	Khadija Adam Tho, ARCE	Luxor Temple, East Bank	December 2010 – June 2012	Ongoing	LE 283,729



	Project Name	Principal Consultants	Location	Start / End Date	Status	Spent by Year 7
B						
5	Emergency Conservation and Training at Karnak Temple: <b>Khonsu Walls and Columns</b>	Christie Pohl, ARCE	Karnak Temple, East Bank	April 2008 – June 2013	Ongoing	LE 1,059,311
6	Emergency Conservation at Karnak Temple: <b>Khonsu Flooring</b>	John Shearman, ARCE	Karnak Temple, East Bank	July 2010 – July 2012	Ongoing	LE 55,053
7	Emergency Conservation at Karnak Temple: <b>Euergetes Gate</b>	Christie Pohl ARCE	Karnak Temple, East Bank	October 2009 – December 2010	Completed	LE 415,160
8	Emergency Conservation at Karnak Temple: <b>Khonsu Epigraphy</b>	Chicago House Epigraphic Survey	Karnak Temple, East Bank	October 2009 – June 2012	Ongoing	LE 885,458
9	Emergency Conservation at Karnak Temple: <b>Khonsu Stone Masonry</b>	Danny Roy	Karnak Temple, East Bank	September 2008 – June 2009	Completed	LE 1,922,957
10	Emergency Conservation at Karnak Temple: <b>Karnak Second Pylon</b>	Christie Pohl, ARCE	Karnak Temple, East Bank	October 2009 – July 2010	Completed	LE 344,985
11	Emergency Conservation at Karnak Temple: <b>Talatat Project</b>	Dr. Jocelyn el Gohary, ARCE	Karnak Temple, East Bank	October 2008 – July 2011	To be continued if budget allows	LE 3,973,680
C	Field School for SCA Architectural Conservators	John Shearman and Saied Hamed, ARCE	Karnak Temple, East Bank	September 2007 – July 2012	Ongoing	LE 6,416,766
D	Luxor Conservation Center (Laboratory)	Christie Pohl, ARCE	Karnak Temple, East Bank	April 2007 – July 2012	Ongoing	LE 3,524,988
F	Conservation of the Mut Temple Foundations	Dr. Betsy Bryan, Johns Hopkins University	Mut Temple, Karnak Complex	April 2007 – June 2009	Completed	LE 3,065,348
G	Groundwater and Structural Monitoring	John Shearman and Magdy Mokhtar, ARCE	Karnak Complex, East Bank	April 2007 – July 2012	Ongoing	LE 3,385,365
H	Preservation of the Sacred Lakes	John Shearman and Magdy Mokhtar, ARCE	Karnak and Mut Temples	April 2007 – July 2012	Ongoing	LE 4,395,699
I	Documentation and Publication	Kathleen Scott, ARCE	Cairo – Luxor	April 2007 - Extended to July 2014	Ongoing	LE 3,930,886

In addition to managing sub-agreements for conservation at Luxor Temple, Khonsu Temple, and Mut Temple, ARCE directly implements major activities included in the Luxor East Bank Groundwater Lowering Response Project. ARCE has chosen to implement these activities, e.g. monitoring, training, establishing and equipping a conservation center, and a field school for SCA conservators, as it will prove more cost-effective than sub-contracting such activities to outside organizations.

Fourteen (14) projects and sub-grants were conducted during the past year, including seven (7) which were completed by the end of Year 7. The work covered projects in both Karnak Temple and Luxor Temple, as well as the ARCE publication program.

## **EMERGENCY CONSERVATION AT LUXOR TEMPLE**

**Statement of the Project:** At the outset of this project, the effects of the groundwater lowering remained unknown. It was anticipated that an increase in salt efflorescence could possibly destroy the relief decoration on the temple walls and their foundations, in addition to structural destabilization. In order to address the negative effects as they occur with immediate remedial intervention, ARCE's Luxor East Bank Groundwater Lowering Project included an Emergency Intervention component. With these funds, ARCE has hired the necessary specialists and procured the necessary equipment and supplies to conduct the conservation intervention. Projects included desalination of decorated and undecorated stone, the replacement of badly deteriorated blocks where possible, moving displaced blocks from direct contact with a wet environment, and correction of any destabilized architectural elements, etc.

Any conservation treatment within the Luxor Temple complex requires the active involvement of Dr. Ray Johnson and his Chicago House (Oriental Institute, University of Chicago) team. With the existing conditions report prepared by ARCE in Year 4 as a background and in close coordination with Dr. Ray Johnson, ARCE identified potential conservation projects within Luxor Temple, including an archaeological investigation of the Roman ruins within the temple. Chicago House requested SCA Permanent Committee clearance for all planned conservation work. Ongoing and completed small projects are listed below:

### **Year 7 Results:**

**3<sup>rd</sup> Salvage Archaeology Field School (SAFS):** A study season was performed from April to June 2011 (Year 7), in collaboration with Dr. Mark Lehner (AERA), which involved recording and analysis of objects found during the Salvage Archaeology Field School in the 2009-10 season. The work was almost entirely performed by past SAFS Egyptian students. Over 400 sandbags of pottery along with small objects, was analyzed in the ARCE Laboratory and catalogued for future publishing. 14 students were trained (8 men and 6 women).

Expenditures for 3<sup>rd</sup> Salvage Archaeology Field School: LE 404,864

Total Salvage Field School Expenditures to Date: LE 1,877,218

**Ramesses II Court Column Cleaning & Patching:** Starting in December, 2009, at the request of the SCA Luxor Inspectorate, ARCE supplied materials and technical support for an SCA project to clean and desalinate 32 limestone columns in the Ramesses II Court at Luxor Temple. They are arranged on two rows on the west side of the court.. Salt damage caused by the rising groundwater level, necessitated cleaning, desalination and patching to stabilize the columns and prevent further damage, now that the groundwater level has been lowered. Work involved the removal of old soluble salt filled cement repairs and cleaning and patching the columns by SCA staff, under ARCE supervision. By

July 2010, 14 of the columns had been repaired by the SCA staff. However, ARCE had some concerns over the quality of the work completed.

The Year 7 Season (October 2010 – June 2011), ARCE mobilized a team (1 Egyptian supervisor and 6 field school graduates) to focus on the removal of cement patches on 8 of the columns located on the west side of the court. The columns were thoroughly documented and re-patched using lime mortar.

Total Ramesses II Court Cleaning Expenditures to Date: LE 283,729

### **Year Eight Planned Activities:**

No further activities are planned for Luxor Temple, other than the cleaning of columns in Ramesses II Court and the installation of visitor information signage.

**Ramesses II Court Columns:** During the period October 2011 – June 2012, SCA conservators who previously participated in the ARCE Conservation Field School, under the supervision of ARCE Conservator Khadija Tho, will continue to remove old soluble salt filled concrete repairs in the remaining 10 columns in western side of the Ramesses II Court.

Objectives:

- 1) Desalination of lower 2 meters of columns where necessary utilizing salt absorbing clay material poultices and repeat as necessary.
- 2) Cleaning of the treated areas with brushes and cotton swabs.
- 3) Application of new lime mortar to lacunae and gaps in the columns, colored to blend with the appearance of existing original stone.

**Total Luxor Emergency Conservation Expenditures through Year Seven: LE 4,433,614**

**Emergency Conservation at Luxor Temple Budget (Year 8): LE 1,289,867**

**Total Budgeted for Luxor Emergency Conservation: LE 5,723,302**

## **EMERGENCY CONSERVATION AT KARNAK TEMPLE**

**Statement of the Project:** The effects of the groundwater lowering at Karnak Temple include salt efflorescence. Emergency Intervention activities at Karnak Temple are included in the Luxor East Bank Groundwater Lowering Project. Khonsu Temple, located at the southwest quadrant of the Karnak Temple complex, has been the focus of ARCE's conservation work at the complex. This choice was based upon assessment of conservation needs with the SCA Inspectorate, and the SCA's specific scope of work as defined in their permission for work to commence. Long ago, the Karnak enclosure exit was changed so that this temple was rarely visited. At the request of the SCA, ARCE has undertaken to provide better access for visitors and to repair, conserve and enhance the presentation of this important site.

**Year Seven Results:** Several activities were conducted in Year Seven in the Karnak Temple complex. They include: Epigraphic Work at Khonsu Temple, Khonsu Walls and Columns, Khonsu Flooring, and the Talatat Project.

### **Epigraphic Work at Khonsu Temple (Chicago House)**

Year 7 Achievements: As with past seasons, Chicago House performed the epigraphy of reused stone blocks exposed by ARCE's floor work in the Khonsu Temple. During the 2010-11 season (Year 7), no existing flooring was found in Chapel 3 so Chicago House continued with epigraphic documentation of stones exposed while ARCE performed flooring work on the west section of the Main Court and

Chapels 11 and 12. Much of the material found in the Main Court can be attributed to the reign of Sety I while the material exposed in the Chapels can be attributed to the reign of Ramesses II. Chicago House will continue the epigraphic work dependent on ARCE's flooring work.

**Total Epigraphic Project Expenditures to Date: LE 885,458**

Khonsu Walls and Columns:

Year 7 Achievements: During the 2010-11 season, 54 SCA Conservators who are students from the past three field school seasons worked with ARCE supervisor/trainers on the following activities.

- West Wall and Column Conservation: In Year 7, the ARCE-led team of SCA conservators completed the wall patching work in the Khonsu Main Court where old cement patches were removed and replaced with lime mortar. Unlike cement, lime mortar is weaker than the surrounding stone and is porous, thus the damage to the stone caused by differing thermal expansion rates coupled by obstruction of moisture and salts from leaving the stone is eliminated. Approximately 90% of the West Wall in the Main Court was completed with student conservators in the advanced field school. The wall damaged was stabilized utilizing advanced methods and the students gained good insight.
- Khonsu Chapel 2 Prototype: A section of wall was cleaned and conserved using advanced conservation methods. The wall section was black with soot and dirt and the plaster was badly damaged in sections. The prototype was to determine the future methods of conservation if chapel work continues.

**Total Khonsu Walls and Columns Expenditures to Date: LE 767,653 (training is not budgeted separately)**

Khonsu Flooring: The addition of sandstone flooring slabs were placed in selected floor sections for visitor safety. The areas included the west section of the Main Court, Chapels 3, 6, 7, 11 and 12. The work was performed by stone masons previously trained by ARCE.

Karnak Talatat Project:

"Talat" is the Arabic name for the distinctive sandstone blocks used to construct new temples at Karnak during the reign of Akhenaten. These temples were demolished after Akhenaten's death and thousands of these talatat were reused as building material in new temples. During the 19<sup>th</sup> and 20<sup>th</sup> centuries the talatat were retrieved from the ruins and those with decoration and inscriptions stored in magazines in the Karnak Temple precinct. By the beginning of the 21<sup>st</sup> century the talatat faced serious conservation issues exacerbated by the poor storage conditions. The project tasks included transfer of each block from the magazine to the work area for cleaning, stabilization, photographic documentation, and recording of data. After treatment, each block was returned to newly built *mastabas* (mudbrick or stone benches) in the storage facility.

With the conservation and documentation of over 16,000 talatat blocks completed in the 2009-2010 season, review and completion of the data base proceeded in Cairo during Year 7 and was approximately 75% complete by the end of the year. The process involves entering detailed data and checking and archiving each data page that was entered for each block.

**Total Talatat Expenditures to Date: LE 3,973,680**

**Year Eight Planned Activities:**

Epigraphic work: Epigraphy by Chicago House is expected to continue in Year 8 on ARCE's flooring work in Chapel's 1 and 2 and other exposed reused blocks in Chapel 7 where ARCE has completed conservation work.

Khonsu Walls and Columns: Work will continue with students in the advanced conservation training program on the west wall in the Main Court. The west wall is expected to be completed early in the season with the focus then concentrating on the eight (8) west columns of the Main Court and a degraded section of wall in the southwest corner of the Main Court.

Khonsu Flooring: Flooring work is planned in Khonsu Chapels 1 and 2 to prepare the area for future conservation work on the walls and columns. All work will be performed by ARCE trained Egyptian masons.

Karnak Talatat Project: Pending availability of project funds in Year 8, a short-term contract will be executed with the Talatat Director, Jocelyn Gohary, to finalize the database. In Year 9, ARCE will determine the best way to make this information public to the archaeological community. For example, an online database that clearly displays USAID and ARCE's logos could be located on a museum or university server.

**Total Karnak Emergency Conservation Expenditures through Year Seven: LE 14,751,664**

**Emergency Conservation at Karnak Temple Budget (Year 8): LE 1,103,960**

**Total Budgeted for Karnak Emergency Conservation: LE 18,334,862**

Illustrations on the following pages show Khonsu Temple conservation activities.





**Figure 1: Khonsu Temple West Wall and Column Conservation**



**Figure 2: Chapel 2 Prototype (before)**



**Figure 4: Euergetes Gate Completed Section of Wall Jamb**



**Figure 3: Chapel 2 Prototype (after)**



**Figure 5: Khonsu Temple Wall Patching**



**Figure 6: Khonsu Temple Flooring (Main Court)**



## FIELD SCHOOL FOR ARCHITECTURAL CONSERVATORS

**Statement of the Project:** Karnak and Luxor temple complexes are massive monuments with acres of decorated and undecorated stone. In order to be able to manage the long-term responsibility of preserving these monuments, the SCA requires institution building through training. ARCE's Field School for Architectural Conservators will result in the creation of a cadre of Egyptian conservators who have participated in the project from its inception and who will be taking the lead in conservation activities at the conclusion of the project. The purpose is to enable the conservation to continue after the lifetime of the project, thus ensuring a lasting legacy of the Luxor East Bank Groundwater Lowering Response Project. Topics of study would include inspection/analysis, assessment of intervention, treatments, documentation and publication.

**Implementation Schedule:** The EAC Luxor Conservation field school started in September 2007. Sessions were conducted each year between October and April so that trainees would have participated in the entire conservation process upon completion of their training. Furthermore, by participating in various conservation projects led by professional conservators at all three temples during the Luxor East Bank Groundwater Lowering Response Project, trainees will experience a variety of different approaches in the face of real situations.

Between September 2007 and April 2010 the Conservation Field School conducted three seasons of training for 76 SCA conservators (43 women and 33 men) in three locations: Khonsu Temple, where painted reliefs were cleaned, the Eurgetes Gate in Karnak Temple, where a masonry support was installed and the structure was cleaned and treated for smoke damage, and new mortar patching was applied on gaps in the wall. Training was also conducted in the Hypostyle Hall of Karnak Temple, where the western wall was desalinated and cleaned to remove dirt and dust.

In addition to practical training, classroom instruction by consultants covered the following topics:

- 1- *Archaeological Illustration*
- 2- *Egyptology*
- 3 - *Adhesives, Consolidants and Solvents*
- 4 - *Geology of Egypt*
- 5- *Stonecutting and masonry*
- 6 - *Consolidation of stone,*
- 7 - *Salts and the mechanisms of salt decay, Clifford Price 2008&2009*
- 8- *Salt Induced Stone Damage and Treatment, Eric Doehne 2010*
- 9 - *Conservation of small objects*
- 10- *Loss compensation*
- 11- *Total Stations (use, function and field application))*
- 12 - *Archaeological Photography*

**Year Seven Results:** During the 2010 - 2011 season, advanced field school training involved application of conservation methods in the field, with very little classroom instruction. 54 SCA conservators who had previously graduated from ARCE Conservation Field Schools participated in the program. Work concentrated on capacity building in advanced conservation techniques along with special attention to leadership capabilities (for future conservation supervisory training). 50% of the students were women. The focus area of work included Khonsu Temple West Wall, Khonsu Chapel 2 Prototype and Luxor Temple Ramesses II Court Columns. (See Appendix 2 – "Training Completed Since Project Inception")

### **Year Eight Planned Activities:**



Season: January 30, 2011 to June 30, 2012

Project Director: Christie Pohl

**Objectives:**

- 1) Apply additional conservation techniques upon the previously cleaned walls and columns from the past three years of the conservation field school. This includes, but is not limited to the following:
  - Documentation before and after treatment (photography, condition reporting and mapping)
  - Stabilization work (injections for detached plaster, mortar edging and grouting, filling of small cracks and larger gaps, additional consolidation). The ceiling and frieze at the top of the wall may require more extensive work.
  - Removal of excess consolidant, mortar and previously used cleaning solutions.
  - Selected cleaning.
  - Classroom Instruction (selected lessons of field encountered applications and more advanced conservation techniques).

**Total Field School for SCA Conservators Expenditures through Year Seven: LE 6,406,684**

**Field School for SCA Conservators Budget (Year 8): LE 1,926,391**

**Total Budgeted for Field School for SCA Conservators: LE 8,949,185**

## **LUXOR CONSERVATION CENTER (LABORATORY)**

**Statement of the Project:** The Luxor Conservation Center was created to provide classrooms for training, a computer lab for data analysis, a conservation laboratory for antiquities that require in-house treatment, and storage facilities for monitoring equipment. The Center was intended to be an integral part of the Luxor East Bank Groundwater Lowering Response Project and to continue beyond project completion as a sustainable resource for the SCA to preserve the monuments of Luxor.

ARCE completed construction and equipping the lab in late 2008. The laboratory is a fully equipped modern facility with basic laboratory instruments from analytical balance to conductivity meter and microscopes. It also contains a fume hood to manipulate dangerous chemicals, an oven and a simple but effective system to produce distilled water, later used during conservation work such as cleaning decorated stone surfaces. It is primarily used as a teaching space for the conservation field school where the trainees learn how to carry out basic conservation tests. Other uses include preparing material needed for conservation. The slaking of lime is important for the quality of the lime mortar. The operation is performed just outside the laboratory at the east end. The laboratory is also conceived to provide space, materials and equipment for other teams working in the greater Luxor area to carry out analysis or conservation work. Finally, it is planned to provide basic analytical capabilities in support of archaeological projects in Karnak.

In July 2009, ARCE recruited a manager to establish procedures, procure supplies for the conservation laboratory. The conservation center will also serve as a training venue for the field school, and for activities related to Karnak and Luxor conservation and archaeological work.

**Year Seven Results:** The 2010 - 2011 season involved the initial training of the Egyptian Laboratory Manager, Abd el Hakim Ahmed el Badry. Mr. El Badry, an SCA employee, has a Masters degree in Conservation from Cairo University and was selected by the SCA for this

position. Immediate training focused on creation of a data base and training in Inventory Control and testing lime mortar components for material Quality Control. The Quality Control aspect also included monitoring and oversight of the lime slaking process located behind the laboratory.

**Year Eight Planned Activities:** ARCE will continue to utilize the classroom for advanced conservation methodology, as well as using the laboratory for hands-on training related to conservation work. ARCE will continue to train the Egyptian Laboratory Manager by sending him for mentoring by an experienced laboratory manager at the Ancient Egypt Research Associates laboratory in Cairo. As the end of the EAC grant approaches, ARCE will take steps to ensure sustainability of the lab operation by working with the SCA to establish a means by which the lab can be used by outside foreign expeditions for a fee. The Season: October 17, 2011 to June 30, 2012

Interim Laboratory Manager/Trainer: Christie Pohl

Objectives:

- 1) To be used for classroom instruction (selected lessons of field encountered applications) described above and as a conservation center of the Karnak site where basic conservation tools and materials can be found.
- 2) Continue to provide proper instruction to the conservation field school trainees in the safe use and the proper cleaning and maintenance of the equipment, materials and chemicals used in and about the laboratory.
- 3) To insure the sustainability of this facility by combining field encountered issues with low-tech analytical laboratory methods.
- 4) To put in place documented procedures for the proper running of the conservation laboratory (basic health and safety manual, standardized analysis sample forms, etc.).
- 5) Train SCA personnel for laboratory takeover at the end of the EAC Project in 2014.
- 6) Maintain and document quality control of lime and mortar through laboratory testing.

**Total Luxor Conservation Lab Expenditures through Year Seven: LE 3,389,153**

**Luxor Conservation Center (Lab) Budget (Year 8): LE 135,836**

**Total Budgeted for Groundwater Monitoring: LE 3,585,005**

## **GROUNDWATER AND STRUCTURAL MONITORING**

### **Statement of the Project:**

The monitoring program includes a series of ongoing measurements intended to identify different types of movement of the temple structures. The measurements include:

- Measurement of the elevation of structures to identify whether they are sinking or rising
- Measurement of distance between a group of temple structures to see if the temple structures are shifting in any direction
- Measurement of crack width and/or the tilting of temple columns.

The three (3) types of methods used to measure the above is as follows:

- Precise Level Measurement – is a measurement of the precise vertical elevation (relative to sea level) of a point fixed on an ancient structure.
- Total Station Measurement – combines horizontal and vertical measurements between groups of temple structures. In this method, several survey measurements are made between locations visible from a reference survey point. The resulting geometry calculation tells the

monitoring program whether any of the temple structures in the group has moved relative to the other objects.

- **Crack and Tilt Measurements** – At selected places on temple structures, special sensors are installed to measure the tilt of a position from the vertical (within a certain plane), or the width of a structural crack. At these selected locations, tilt meters and crack meters were installed. The locations for these sensors were selected in consultation between archaeologists and the SCA.

ARCE entered into a contract with SMT Associates in early 2009 to provide additional observation on supplemental monitoring points in the Luxor Temple. ARCE performed the routine monitoring program, taking readings in both Luxor and Karnak Temples every three days, in conjunction with SMT Associates. The 2009-2010 Season continued the monitoring program and generated semi-annual reports. As of the last report, no significant movement or destabilization of the temple structures following startup of the dewatering systems at Karnak and Luxor Temples has been recorded or witnessed.

**Year Seven Results:** ARCE is in its fourth season of monitoring of the groundwater level and structural components of both Karnak and Luxor Temples. Data has shown no significant movement as a result of the actions of the dewatering system. Measurements were taken 3 days a week and the data is compiled every 6 months. The data shows that the groundwater system is working fine in keeping the groundwater at the stipulated level.

Although ARCE does not perform the structural monitoring via surveying, the project team is still able to obtain the data and places this in the semi-annual progress report. Thus, the document is a complete monitoring report.

**Year Eight Planned Activities:** Continue to monitor the groundwater system.

**Total Groundwater Monitoring Expenditures through Year Seven: LE 3,385,365**

**Groundwater and Structural Monitoring Budget (Year 8): LE 199,639**

**Total Budgeted for Groundwater Monitoring: LE 3,585,005**

## **PRESERVATION OF THE SACRED LAKES**

**Statement of the Project:** This project commenced in April 2007 to address the problems of the groundwater lowering for the great sacred lake of Amun at Karnak Temple and the somewhat smaller sacred lake of Isheru at Mut Temple. The Karnak sacred lake is a focal point for tourists so water levels must be maintained. Before the Groundwater Lowering Project became a reality, the Sacred Lake at Karnak was normally refilled with Nile water. This caused a large weed buildup throughout the lake. ARCE shut off the Nile water and replaced it with cleaner groundwater. After removing the weeds, chemically treating and implementing a maintenance routine, ARCE handed the clean lake back to the SCA to maintain in April 2010.

The Mut Temple Sacred Lake is a natural refuge for wildlife but has been contaminated with chemicals and is now threatened by extinction due to the groundwater lowering project. The Mut lake will be the heart of the planned Mut Temple archaeological park. Its crescent shape forms a key

element of the New Kingdom temple complex of the goddess Mut, which lies a short distance south of Karnak and is connected to it by a sphinx-lined processional way. This type of lake was known in ancient Egyptian as '*isheru*', and was specifically associated with leonine goddesses. The Mut temple lake is the largest example of an *isheru* known in Egypt. It is of New Kingdom origin, and may have formed part of the original temple complex, which seems to have been begun in the earlier part of the 18<sup>th</sup> dynasty under Hatshepsut and Tuthmosis III (roughly the middle part of the fifteenth century BC). The lake edges were refitted with stone walls, which were repaired and modified over a long period, at least until the time of the Ptolemies in the last centuries BC. The Sacred Lake at Mut Temple had many problems with weed infestation surrounding the lake and in the lake itself.

During the 2009-10 season, ARCE staff led by Magdy Mokhtar, in collaboration with Dr. Betsy Bryan, Johns Hopkins University, developed several prototypes to determine the best way to prevent the weed growth around the Mut Lake. The section that worked ideally had a plastic liner that prevented new weed growth.

### **Year 7 Results:**

**Karnak Sacred Lake:** ARCE has now handed over maintenance of the Karnak Sacred Lake to the SCA.

**Mut Sacred Lake:** Monitoring of the weed/plant accumulation at Mut Lake was conducted throughout summer 2010. During the 2010-2011 season, the weeds around the lake were removed and a heavy duty plastic liner was placed around the lake embankment. This proved successful and there is minimal growth around the lake.

The lake's water source is the groundwater. With no circulation, the lake became stagnant and produced a bad odor. ARCE installed a sump pump regulated by a float. The pump switches on when the lake is at its highest and lowers the level approximately a half a meter. The pump then shuts off and allows fresh groundwater to fill the lake thus keeping the lake refreshed.

A walkway prototype was also developed to determine the best walkway to surround the lake. The walkway was constructed with a mixture of sand, dry cement and stone and with the approval of the SCA, the walkway can be installed next season.

**Year Eight Planned Activities:** Receive acceptance of the prototype walkway from the SCA and install the walkway around the lake.

Season: October 25, 2011 to June 30, 2012

Project Manager: Magdy Mokhtar

Objective: After SCA approval, prepare a section around the lake for the installation of a walkway consisting of a mixture of sand, dry cement and stone.

**Total Sacred Lakes Expenditures through Year Seven: LE 4,395,699**

**Sacred Lakes Budget (Year 8): LE 229,474 (Mut Lake only)**

**Total Sacred Lakes Budget (Cycle 3): LE 4,625,173**

### **SIGNAGE**

Appropriate visitor information will be installed at ARCE project sites throughout the Karnak and Luxor Temple complexes to provide an explanation of the work completed at each site, as well as proper acknowledgement of the cooperating agencies.

**Results in Year Seven:** In Year 7 ARCE produced draft signage text for the different sites where EAC interventions have taken place. ARCE discussed selection of locations with the SCA Inspectorate.

**Year Eight Planned Activities:** Complete signage text and receive approval from USAID and the SCA. Furnish and install signage. In the past, ARCE's has been unable to locate firms on the local market that meet international standards for durability and quality for production of outdoor signage. This led to the selection of a firm in Switzerland, Atelier Uznaberg, Alte Uznabergstr. 9, 8730 Uznach, Switzerland. In Year 8, ARCE will survey the local market again to determine if a local firm can be located to meet standards for sign production.

Season: September 19, 2011 to July 14, 2012

Cairo Coordinator: Kathleen Scott

Luxor Coordinator: John Shearman

Objectives:

- 1) Generate draft summary information for final project signage at Khonsu Temple, Mut Temple and Luxor Temple.
- 2) Review and receive approval of the drafts from the following:
  - ARCE staff
  - USAID
  - SCA
  - Richard Fazzini and Betsy Bryan (Mut Temple)
- 3) Purchase signage
- 4) Install signage at SCA approved locations.

## **PUBLICATION AND DOCUMENTATION**

**Statement of the Project:** *In its request for an extension to the EAC Grant, submitted by ARCE to USAID in July 2008, three separate budget line items related to publication and archiving, and approved under the original grant, Modification 1, and Modification 4, were combined into one line item under Cycle 3, to simplify the grant budget. The budget included salaries for the Publications Director (75%), Photographer/Designer (100%), Archivist (25%), and Librarian (25%), as well as subventions for book publication.*

Publishing the results of conservation and training programs remains an important goal. The vast amount of technical data and descriptive reports generated by both the Luxor East Bank Groundwater Lowering Response Project and the ARCE conservation projects funded in Cycles One, Two and Four will be invaluable to future generations both as an archive and as a series of published monographs detailing the project as a case study in conservation on a large-scale at one of the world's most significant ancient sites.

Additionally, the archaeological material discovered during the course of USAID's investment in the "Salvation of Karnak and Luxor Temples" groundwater-lowering project needs to be published for the benefit of scholars working in several different fields.



ARCE's publication and documentation program will result in the production of an archived database containing the information collected and stored over the course of EAC project. It will also provide published materials including web-based archives, conservation training manuals in English and Arabic, and final published reports and case studies.

**Year 7 Results:** No books on EAC subprojects have been published to date, however, significant progress on three manuscripts has been made. ARCE's publication program has continued to complete publication of books on EAP projects that were begun under the ARCE Conservation Series, while commencing with projects started under the EAC. Additionally, ARCE publishes a semi-annual Conservation Update about EAC projects for distribution to stakeholders and visitors.

Work continued on the preparation of a manuscript entitled *The Art of Maintaining an Empire: Roman Wall Paintings in the Luxor Temple*. Contributing authors are writing chapters and co-editors (Michael Jones of ARCE and Dr. Susanna MacFadden) are working to complete a draft manuscript by the end of 2011 or early 2012.

*The Tomb of Menna* manuscript was compiled during 2011 and editing is being done by ARCE and project director Dr. Melinda Hartwig.

Due to political unrest, conservation campaigns at the Red Monastery have been re-scheduled for an additional year, thus delaying completion of some of the chapters relating to conservation results. Bolman and other contributors have been working together during the year to further compile the manuscript. Work has begun in earnest on *The Red Monastery Church: Magnificence and Asceticism in Upper Egypt* edited by Dr. Elizabeth Bolman. There are numerous contributing authors and each will be working on individual chapters or appendices. Each author has been sent a contract specifying dates of completion of his/her contribution to the book.

**Year Eight Planned Activities:** The co-editors of *The Art of Maintaining an Empire: Roman Wall Paintings in the Luxor Temple* will continue to work with contributing authors to complete a draft manuscript by early 2012. A publishing contract will be finalized with Yale University Press.

The final report received by ARCE from Dr. Melinda Hartwig on documentation and conservation of the Tomb of Menna will be reviewed by Michael Jones and Kathleen Scott. From this report, a manuscript will be developed for publication. ARCE plans to present this manuscript for consideration to AUC Press in 2012, for publication in late 2012 or early 2013.

Work will continue on documentation of conservation activities in Luxor and some of these may be published in the form of articles and monographs in ARCE publications such as JARCE or the Bulletin. The manuscript for *A Study of Artifacts Recovered during the Groundwater Lowering for Karnak and Luxor Temples Project* is being edited, but, to preserve the EAC publications budget for larger projects, this publication will be funded through other ARCE sources.

The Aga Khan Cultural Trust has not indicated any interest in pursuing the publication with ARCE of the Aslam Silahdar Mosque conservation project and so the Director of ARCE has put this publication project on hold.

It is anticipated that the results of the project, "Documentation of Historic Buildings in Luxor" will be published, however, ARCE has not decided on the form of publication.

ARCE will continue to publish its "Conservation Update" twice yearly.

**Total Expenditure through Year Seven: LE 3,930,886**

**Estimated Budget for Year Eight: LE 2,257,342**

**Total Publications Budget (Cycle 3): LE 7,569,072**

**LUXOR SALVAGE ARCHAEOLOGY**  
**MODIFICATION Nos. 3 & 4 (CYCLE FOUR)**  
**March 1, 2007 – July 14, 2009**

**Introduction**

There are currently three expected outcomes under Cycle Four, as approved by USAID in Modification No. 3 and 4 to the EAC Agreement :

1. Salvage Archaeology Field School – Avenue of the Sphinxes;
2. Documentation of Existing Architecture, and Conservation of Decorated Ancient and Medieval Blocks;
3. Publication.

A fourth outcome, “Archaeological Monitoring in the West Bank of Luxor” was included in this modification, in response to the proposed groundwater lowering project surrounding Medinat Habu and other temples on the West Bank. ARCE attempted to enter into discussions with CDM in 2008, during the design stage of the project, and presented an outline for the work of the monitoring project to USAID and the SCA. The CDM project went ahead without ARCE’s involvement. After negotiations with USAID and the SCA in March 2008, it was made clear by Dr. Zahi Hawass that this would be an “Egyptian project,” and that ARCE would not participate.

The Salvage Archaeology Field School and Documentation of Historic Buildings in Luxor were implemented between July 2007 and August 2008. Activities approved under Modification No. 4 for publication were consolidated with USAID’s various agreement modifications and are presented in a single Publications description in the Cycle Three section of this report.

**Cycle Four Sub-projects:**

The following projects were approved for Cycle Four subproject implementation, commencing in Year Three (October 2006 – September 2007).

Project Name	Principal Consultants	Location	Start / End Date	Status	Amount spent by end of Year 7
Salvage Archaeology Field School,	Ancient Egypt Research Associates (AERA) Directed by Dr. Mark Lehner	Avenue of the Sphinxes, Luxor	Jan-08 / March-08	Completed	LE 2,477,526
Documentation of Luxor’s Historic buildings	Hampikian-Ibrashi, Architecture & Heritage Management	Luxor	July-07 / Aug-08	Completed	LE175,573



## **FURTHERING CONSERVATION AND TRAINING INITIATIVES**

### **MODIFICATION NO. 6 (CYCLE 5)**

**July 15, 2009 – July 14, 2014**

#### **Introduction**

There are currently five sub-projects approved under Modification No. 6 to the EAC Agreement. The project descriptions below describe accomplishments to date and planned activities under the EAC Program Plan for Cycle Five funding.

<b>Project Name</b>	<b>Principal Consultants</b>	<b>Location</b>	<b>Start / End Date</b>	<b>Status</b>	<b>Total Budget (LE)</b>	<b>Spent by Year 7</b>
Conservation of the Red Monastery Church, Sohag (continuing from Cycle 2)	Dr. Elizabeth Bolman, Luigi De Cesaris & Alberto Sucato, Restorers	Sohag	October 2009 – Extended to July 2012	Ongoing *	14,760,483	6,070,779
ARCE Field School (continuing from Cycle 1)	Ancient Egypt Research Associates, Inc. (AERA)	Giza Plateau	Extended to December 2011	Ongoing *	2,390,094	1,126,696
Conservation of the Shunet al-Zebib, Abydos	Dr. Matthew Adams (New York University/Institute of Fine Arts)	Abydos (Sohag)	January 2010-March 2014	Ongoing	4,155,139	1,771,574
Creation of a Museum at St. Antony's Monastery	Fr. Maximous El-Antony	Red Sea, Egypt	January 2011-July 2012	Ongoing	2,611,898	116,369
Site Management in Historic Cairo	ARCE- managed	Cairo	July 2009 - July 2012	Ongoing	1,238,207	546,332

\* Continued from previous cycles with additional funding

### **CONSERVATION OF WALL PAINTINGS AT THE RED MONASTERY: (Additional Funding Under Cycle Five )**

**Implementation schedule:** Five additional campaigns of conservation within the church have been re-scheduled (due to political events in 2011) for the period Fall 2009 (EAC Year 6) to Fall 2012 (EAC Year 9), after which final documentation will be conducted. Years 9 and 10 will be dedicated to the writing, designing and production of the book for publication by Yale University Press.

The sixth and seventh campaigns at Red Monastery, under EAC Cycle 5, took place in Year 6, during Fall 2009 and Spring 2010. In Fall 2009, conservation work continued on the right side of the façade, the Diaconicon vault (southeast corner room) and the northwest corridor wall. The decorated archway of the passage between the Prothesis and the north corridor was cleaned. In

Spring 2010, conservation was carried out in different tiers of the East Lobe of the Tri-conch and in the Diaconicon vault.

### **Year Seven Results:**

Conservation work completed in the Fall 2010 campaign included the cleaning of paintings in the east semi-dome in the Tri-conch, the final section of the Façade wall (upper northern end), and most of the remaining areas of level I of the east lobe (all but the niches). The work in the semi-dome revealed primarily figural subjects executed on three distinct paint layers (second, third and fourth). On the enclosed section of the Nave wall (near the north end of the Façade wall) there is one more large ornamental cross from the medieval phase that was and work in the lower section of level I of the east lobe revealed a sequence of third phase *trompe l'oeil* curtains extending along the full length of the wall beneath the niches, a portion of which has already been revealed. The work in the semi-dome (the uppermost section of the Eastern lobe) revealed a complex stratification of paint layers representing four phases of painting and re-painting inside the church. This is made visually confusing because later layers have fallen away revealing large sections of the preliminary drawing for the very first paintings applied to the semi-dome in the 6<sup>th</sup> century. The critical question of how to complete this semi-dome in a manner that allows the paintings to be displayed coherently will be a major discussion in future campaigns and a preservation and presentation challenge.

Political events in January 2011 led to the cancellation of the conservation season planned for Spring 2011. In lieu of this, a short 'study season' was conducted for 2 weeks which allowed 3 of the conservators and specialist contributors to the planned publication to work on their chapters while studying the architecture and wall paintings.

**Year Eight Planned Activities:** Conservation work for the Fall 2011 campaign will be concentrated on completing the following surfaces: the clerestory west wall (window height level as well as arch level); icons in two niches on the ground floor of the Eastern lobe; and the monochrome cross of the North wall façade. Conservation of the monumental columns will also be completed. Conservation will also continue from the previous season on the ceiling of the Prothesis, as well as on a painting of an Equestrian Saint on the North Wall façade. An additional campaign will be conducted in Spring 2012, to make up for time lost due to cancellation of the Winter-Spring 2011 conservation campaign.

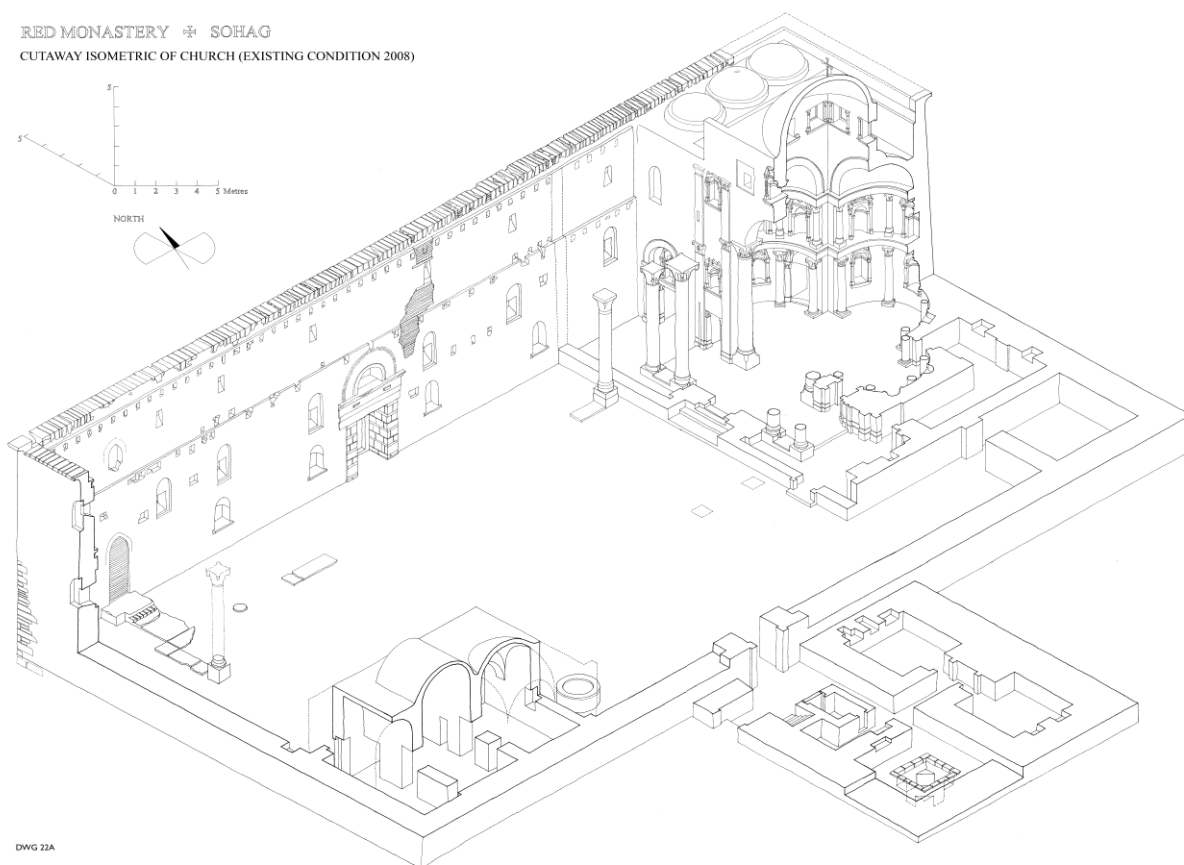
**Total Expenditure through Year Seven: LE 6,070,779 (2,736,922 spent in Year 7)**

**Estimated Expenditures in Year Eight: LE 4,043,111**

**Total Red Monastery Budget (Cycle 5): LE 14,760,483**



**Figure 7: Paintings on the East Semidome, Red Monastery Church, Sohag**



**Figure 8: Isometric Drawing of the Red Monastery Church, Sohag**

## **ARCE FIELD SCHOOL: ADDITIONAL FUNDING UNDER CYCLE 5**

### **Statement of the Project:**

Under Modification No. 6, ARCE will offer three field schools to continue building a cadre of skilled archaeologists within the SCA. As a result of having run successfully six field schools (Beginners, Advanced and Salvage Archaeology) in Giza and Luxor, the AERA Field School now has a pool of well-trained and specialized Egyptian staff fully able to excavate, record, teach, and publish in demanding archaeological conditions.

**Implementation schedule:** Three field schools were planned for implementation in Giza from January 2010 to July 2011. Due to a direct request by the Luxor SCA Inspectorate to hold a Salvage Archaeology Field School in Luxor during 2010, only two will be conducted in Giza. The first was completed in May 2010, and the second is scheduled for Fall 2011.

The Cycle 5 Salvage Archaeology field school was organized in Luxor from January 9 to March 15, 2010 to train 32 SCA inspectors in salvage and rescue archaeology on the last remnants of the original Luxor town mound directly north of the Luxor Temple. The mound was scheduled to be demolished to the level of the surrounding area prior to any study. The remaining tell contained remnants of more than 2,000 years of history of life in old Luxor. Training components included site assessment, site survey and mapping, stratigraphic excavation, and recording archaeological deposits with drawing and photography. Of the total number trained, 7 were female.

A second field school (under Cycle 5) took place at the Giza Plateau from March 20 to May 13, 2010, training 29 SCA antiquities inspectors in "Advanced Publication and Analysis." Of the total number trained, 8 were female. The goal of this Field School cycle was to enable SCA inspectors to practice all the stages of recording, analyzing and publishing archaeological data. In the Advanced Field-Schools (2006 and 2009) and the 2008-2010 Salvage Archaeology Field Schools in Luxor, much progress was made practicing sampling strategies, for both sites and archaeological material, and in writing desktop assessments and reports. A series of lectures and seminars was held on basic research procedures, in addition to basic English grammar and writing. The group was broken down into 6 areas of study: excavation, osteology, graphics, ceramics, zoo-archaeology and archaeobotany. The teams retrieved data from the GPMP archive and online database, as well as the library of the German Archaeological Institute in Cairo (DAIK), to create databases in their respective areas. The outcome of the APFS 2010 was a compilation of archaeological reports, over 250 pages long, ready for publication.

**Year Eight Planned Activities:** The third and final "Fall 2011 Mit Rahina Beginners Field School" under EAC Cycle 5 is scheduled to occur during the 8-week period from September 10th to November 3rd, 2011.

The field school site is in the area known as Kom Fakhry, near the ancient city of Memphis (now known as Mit Rahina), which comprises a mixture of mudbrick settlement and masonry funerary structures that would be very suitable for the field-school training.

The field school will be held in collaboration with the EES Survey of Memphis (SoM), directed by Dr David Jeffreys. This project has for many seasons surveyed and recorded the Memphite settlement in its ancient landscape context. The addition of geo-archaeological work and training in sediment coring and in a wider-site and regional survey program is one major reason for locating the Beginners Field School at Mit Rahina and for the collaboration with the SoM.

The increased number of graduates and the experience of running the six previous field schools had resulted in the adjustment of staff structure for the coming 2011 session. A total class of twenty-seven (27) students is planned for, organized into five groups, with a rotating survey and osteology group of four students. There will be two joint field-school directors and four non-SCA site supervisors, as well as one conservator, two ceramicists, one archeo-botanist and a zoo-archaeologist. Six specialties will be covered: recording and analysis of ceramics, of small finds, archaeological illustration, faunal analysis, floral analysis, and conservation. Nineteen Egyptian supervisors will work with and teach the student groups, including ten archaeologists, one object registrar, one archivist, two ceramicists, two illustrator/photographers, an osteologist, a zoo-archaeologist and a surveyor.

While students will be introduced to the use of computers, GIS, and state-of-the-art survey, more emphasis will be placed on practical techniques and methods that inspectors will be able to use in their respective areas of responsibility. The basic teaching focuses on pragmatic "low tech" skills and methods that will be useful in the working conditions encountered in Egyptian archaeology and the need for rapid, inexpensive intervention in most archaeological sites.

A basic archaeological kit is provided to the field school students, including excavation and drafting tools, a MoLAS (Museum of London Archaeological Site) manual and a GPMP Site Manual (a site-specific bilingual English/Arabic manual). This kit will enable students, once the field school is completed, to set up an archaeological site, including laying out a grid, excavating, recording, planning, and section drawing.

**Total Expenditure through Year Seven: LE 1,126,696 (102,973 spent in Year 7)**

**Estimated Expenditures in Year Eight: LE 1,263,398**

**Total Field School Budget (Cycle 5): LE 2,390,094**

## **CONSERVATION OF THE SHUNET AL-ZEBIB, ABYDOS**

**Introduction:** This project is a continuation of work done by New York University Institute of Fine Arts (NYU/IFA) with funding by the Egyptian Antiquities Project (EAP) USAID-funded grant which ended in 2003. Under the co-direction of Dr. Matthew Adams and Dr. David O'Connor, work commenced in 2001 to preserve the funerary monument of King Khasekhemwy, which dates to 2750 B.C. It is the best example of Egypt's earliest tradition of royal mortuary building still standing today. Given that its thick walls still stand to near their original height of 11-12 meters. To date, approximately 50% of the 200-meter perimeter has been conserved using newly made mud bricks of the same size and materials as the original, to re-establish structural integrity that is in keeping with the original characteristics of the monument.

Additional funding under Modification No. 6 for these three seasons of work, will result in complete stabilization and conservation of this enclosure, which is under threat of collapse, as evidenced by the World Monuments Fund including it on its 2008 Watch List of the World's 100 Most Endangered Sites. The site can be visited on request and provides unique opportunity to observe the oldest mudbrick funerary enclosure in existence.

**Implementation Schedule:** Work is scheduled over four seasons; each of approximately three months duration: Spring 2010 (Year 6), Spring 2011 (Year 7), Spring 2012 (Year 8) and Spring 2012 (Year 9) of which three campaigns will be supported by the EAC Grant.



**Year Seven Results:** The first season under EAC Mod. 6 was completed at the end of Spring 2010. Work continued on stabilization of the walls and documentation. A second season commenced in mid-January 2011, but was terminated after two weeks when the team was evacuated on Feb. 3, due to political unrest. A visit was made in June 2011 to assess damage to the site during the security void, and while the damage at the site was significant, overall the looting had been far less than feared. Looters never approached the Shuneh enclosure at all. Security has been reestablished at the site, and other projects have been working in Abydos as of May 2011. Work will be resumed in early 2012 if security is restored by that time.

**Year Eight Planned Activities:** The second season, suspended in 2011, will be resumed in January 2012, to complete the work planned for 2011. The project team, consisting of mud-brick conservation experts, preservation architects, archaeologists, surveyor, structural engineer, photographer and draftsmen, will conduct the following activities:

*Field Season 10, January – April 2012:*

East wall, main enclosure

- i) complete stabilization of the upper part of the high standing northern part of the east wall
- ii) complete stabilization of the monastic cell voids in the interior side of the east wall
- iii) continue stabilization of the undermined interior side of the east wall
- iv) begin stabilization of the high standing southern part of the east wall

North wall, main enclosure

- v) continue comprehensive stabilization of the north gateway
- vi) complete stabilization of upper part of the north wall, interior side

South wall, main enclosure

- vii) continue comprehensive stabilization of the south gateway area
- viii) begin stabilization of undercut interior side of the south wall

West perimeter wall

- ix) complete stabilization of the exterior side of the west perimeter wall
- x) cap wall top, north and south halves

South perimeter wall

- xi) begin stabilization of the exterior side of the south perimeter wall

**Total Expenditure through Year Seven: LE 1,771,574**

**Estimated expenditures in Year Eight: LE 848,343**

**Total Shunet El-Zebib Budget (Cycle 5): LE 4,155,139**

## **CREATION OF A MUSEUM AT ST. ANTONY'S MONASTERY**

**Statement of the Project:** St. Antony's Monastery on the Red Sea is perhaps the most important Coptic monastery in Egypt. With USAID support from 1996 to 1999, ARCE brought to light the unique wall paintings dating to two phases of work in the sixth and thirteenth centuries. The results of this project are published by Yale University Press in *Monastic Visions: Wall Paintings in the Monastery of St. Antony at the Red Sea* (2002), an illustrated book that presents these beautiful medieval paintings and the USAID-funded conservation program that brought them to light. With the additional funding provided under Modification No. 6, ARCE will build upon USAID's earlier

investment at St. Antony's Monastery to enhance the visitor experience and tourism potential of the monastery through the creation of a museum. The museum will inspire and strengthen understanding among various communities. The educational museum will enable foreign and Egyptian visitors to interact with real objects, supported by scholarship and knowledge, so as to expand their experience. Over the centuries, the monks have gathered a fine collection of decorative metal (e.g., chandeliers, chalices), icons as old as the sixteenth century, vestments from the seventeenth through nineteenth centuries, including those belonging to Pope Kirillos IV, and household objects of wood and pottery that document the daily life of the monks. These objects of faith and life need proper display and storage. Some also require conservation. The Monastery has made an initial investment of building renovations and display case construction.

Due to unforeseen events, in particular the political unrest in Egypt, startup has been delayed. In September 2011, the ARCE project will start by computerizing data on the museum objects, currently on a paper registry created by the monks, so that the project personnel, as well as visitor, scholars and monks might have easier access to the information. ARCE will provide expertise in exhibit design, selected textile and icon conservation, and curatorial training. A storyline for the museum will be developed and illustrative exhibit panels created so as to display the artifacts within context. Special artifact mounts will be created for the precious and fragile vestments so that they may be displayed safely. A brief informational brochure about the monastery's collection will be produced in Arabic and English to promote the museum and its goals. Directly above the museum, the monastery has built a workshop which may be used as conservation laboratory.

**Total Expenditure through Year Seven: LE 116,369**

**Estimated Budget for Year Eight: LE 1,239,722**

**Total St. Anthony's Museum Budget (Cycle 5): LE 2,611,898**



**Figure 9: Existing museum at St. Anthony's Monastery, Red Sea**

## **SITE MANAGEMENT IN HISTORIC CAIRO**

**Statement of the Project:** Historic Cairo (also known as “Islamic Cairo”) is an area universally recognized for its architectural and historic importance and is counted among UNESCO’s World Heritage Sites. Yet this area attracts scant attention from visitors, with the only exception being the Khan el-Khalili bazaar. Since the 1980’s, the Egyptian Ministry of Culture’s Historic Cairo Project and the Supreme Council of Antiquities have worked ambitiously to conserve several historic and religious buildings in the area. Supporting the Egyptian government’s efforts, organizations such as ARCE, the German Archaeological Institute and the Aga Khan Cultural Services-Egypt (AKCS-E) have also undertaken conservation projects in the area.

Since 1995, ARCE and USAID have preserved six monuments within close proximity to the Darb al-Ahmar. This strategy to conduct “area conservation” aims to achieve concentrated neighborhood impact, which will attract visitors, further investment and lead to the general upgrading of an entire area. With the Bab Zuwayla as the central landmark, ARCE conserved Bayt al-Razzaz, the Zawiya/Sabil of Farag ibn Barquq, the minbar and shops of the Mosque of al-Salih Tali’i’, the Sabil of Nafisa al-Bayda, the Wikalat Nafisa al-Bayda and the Sabil of Mohammad Ali. These monuments are within walking distance from each other and cover a range of periods in Islamic history, making each of them unique in architectural style and function. The project will include final preparation of the Sabil Mohamed Aly Pasha for visitation by the public, and the development of a visitor orientation center at the Zawiya Farag Ibn Barquq. Handouts illustrating visitor walking routes will be produced, and signage will be installed, providing practical tourist itineraries with information panels along the streets of the Darb al-Ahmar district.

Originally the proposed plan involved the joint development of a site management plan, in collaboration with Aga Khan Cultural Services – Egypt. A series of meetings was held in 2009, to work on a visitors route to be included in AKCS-E published materials, however the counterparts later became unavailable. Meetings were also held with the SCA inspectorates to discuss re-use of the monuments as visitors’ centers. The issue of reaching a collective vision was challenging, however, and it was decided to proceed with a plan that focused attention on the sites conserved by ARCE.

In Year 6, preparation work on Sabil Mohamed Aly was completed, in readiness for a public opening ceremony. Toilets were installed for visitors, and repairs were made in the courtyard and roof to prevent further damage from water leakage. The site was officially handed over to the SCA in March 2010. Work began on Zawiyya Ibn Barquq in June, 2010 and was completed by the end of summer 2010.

### **Implementation Schedule:**

**Year 7 Results:** In mid-2010, Ms. Hoda Abdel Hamid (ARCE) conducted a survey of monuments in the Historic Cairo area and developed a scope of work for adapting the Zawiya Ibn Barquq as a visitors’ orientation center. The results of her survey would form the basis of a site management plan for the Darb Al-Ahmar area. Unfortunately this work was interrupted by Ms. Abdel Hamid’s resignation in October 2010. A scaled-down scope of work was agreed upon, to be completed by Mr. Jarek Dobrowolski during the winter of 2011, however, the project stalled again with his departure in July 2011.



**Year Eight Planned Activities:** ARCE will identify a consultant to complete the project. The remaining tasks include:

- Opening the Visitor's Center at Sabil Farag Ibn Barquq, and possibly Bayt al Razzaz and Sabil Mohamed Aly
- Developing visitors' walking routes, that are complementary to those in the AKCS-E plan
- Production and installation of visitors routes signage
- Production and installation of information panels at the ARCE-conservation sites
- Production of 10,000 brochures and maps
- Establishing links with travel agents and tour guides to raise awareness about the Darb Al-Ahmar historic area

**Total Expenditure through Year Seven: LE 546,332**

**Estimated Budget for Year Eight: LE 691,875**

**Total Site Management in Historic Cairo Budget (Cycle 5): LE 1,238,207**

### **EAC Budget**

The EAC Cooperative Agreement No. 263-A-00-04-00018-00 states under Article A.13.4, Advance Payment, that "One year's worth of operation cost plus cycle funds will be disbursed in advance in two separate tranches. Further release of cycle funds will depend upon the grantee's plan, subgrant completion and review and concurrence by the CTO."

ARCE herein submits its budget and implementation plan for Year Eight of the EAC Grant, and requests approval for the additional obligation of Year Eight operating costs, and Year Eight program costs.

**Annex A contains two budget summaries detailing ARCE's 10-year summary budget (Attachment No. 1) and ARCE's 10-year program (Cycle) budgets (Attachment No. 2).**

### **EAC Grant Explanation**

**Modification No. 1, dated February 25, 2007**, awarded an additional LE 50,200,000 to the EAC Grant and revised the program description, enabling ARCE to address the conservation needs of the Karnak, Mut and Luxor temple complexes following the implementation of the USAID-funded groundwater lowering system. The award included additional ARCE operating expenses, and funding for emergency interventions to be sub-granted for implementation by principal stakeholders (referred to herein as "Cycle Three").

In its Year Three workplan (July 2006 – July 2007) ARCE requested USAID approval for a budget revision, submitting a detailed budget for its ARCE-managed Cycle Three Program. This followed after discussions with the USAID/Cairo program office during the period April – June 2007, during which it was agreed that ARCE would establish a financial monitoring system that allows reporting of progress on the five ARCE-managed activities in Luxor. Part of the costs in the Modification No. 1 OE budget were allocated to each specific ARCE-managed outputs.

In its Year Four workplan (July 2007 – July 2008), ARCE requested USAID approval for a budget revision which re-allocated funds within the estimated total budget amount. The budget requested LE 84,260,450 in program/cycle costs over the 5-year project and of LE 28,381,520 in administrative costs that are not specifically allocable to program outputs.

**Modification No. 3 signed in July 2007**, obligated an additional award of 211,084 to ARCE for mobilization of emergency archaeological monitoring and conservation training. This mobilization payment was, in effect, an indication of USAID's intent to commit funds in response to a proposal submitted by ARCE for an expanded scope of work in the West Bank of Luxor and the Avenue of the Sphinxes on the East Bank.

**Modification No. 4, signed in November 2007** awarded an additional LE 10,990,970 to ARCE for the above-mentioned activities. The award included additional ARCE operating expenses, and funding for emergency interventions to be sub-granted for implementation by principal stakeholders (referred to herein as "Cycle Four.") Modification 4 did not include the requested budget revision.

On July 30, 2008, ARCE sent a proposal to USAID for furthering conservation and training initiatives by extending the EAC grant through July 2014. The proposal requested additional OE and program/cycle expenses – and increase of LE 36,609,183. **Modification 5, signed May 3, 2009**, which obligated LE 37,730,886 to the grant, also did not include the requested budget revision.

The budget revision requested by ARCE since June 2007 was included in **Modification No. 6, signed July 7, 2009** which extended the EAC Grant period to July 14, 2014, with an additional funding amount of LE 36,609,183, for the completion of large-scale conservation initiatives and continuation of successful training programs for SCA personnel. The award included ARCE operating expenses and funding for proposed activities to be sub-granted for implementation by principal stakeholders (referred to herein as "Cycle Five.")

**Modification No. 7 signed in July 7, 2010**, obligated an additional amount of LE 31,741,349 to ARCE for program and operating expenses requested with submission of the EAC Year 6 Workplan and Budget.

## **APPENDIX 1**

### **Articles and Publications on ARCE Projects**

1. “Egyptian Antiquities Attacked and Under Threat” – Ahram Online, (an article about thefts from the Egyptian Museum and other antiquities sites, which mentions the new EM Registration and Collections Management department.) March 3<sup>rd</sup> 2011
2. “Egypt’s Museums: High Hopes for Egypt’s First Institute of Museology” – Al Masry Al Youm, (an article about the SCA seeking funding for the creation of a new institute for museum training, which mentions ARCE as a potential partner) May 25, 2011
3. “Back to School for Museum Staff” – Al-Ahram Weekly (an article about the Egyptian Museum Registrars’ Training project) May 22<sup>nd</sup> , 2011
4. ARCE Conservation Update – 2011 (published by ARCE)

**TRAINING COMPLETED SINCE PROJECT INCEPTION**  
**Egyptian Antiquities Conservation Project**  
**Cooperative Agreement No. 263-A-00-04-00018-00**

<b>Course Title</b>	<b>Subproject Name</b>	<b>Location</b>	<b>Start Date</b>	<b>End Date</b>	<b>No. of Males</b>	<b>No. of Females</b>	<b>Total Participants</b>
Beginners Field School #1 (Cycle 1)	ARCE Field School for SCA Inspectors	Giza Plateau	Jan. 25, 2005	March 22, 2005	14	4	18
Apprenticeship Field School #2 (Cycle 1)	ARCE Field School for SCA Inspectors	Giza Plateau	Sept. 29, 2006	December 22, 2006	22	10	32
Beginners Field School #3 (Cycle 1)	ARCE Field School for SCA Inspectors	Giza Plateau	Feb. 2, 2007	April 30, 2007	16	7	23
Advanced Field School #4 (Cycle 1)	ARCE Field School for SCA Inspectors	Giza Plateau	Feb. 7, 2009	April 3, 2009	23	15	38
Avenue of the Sphinxes (Cycle Four)	Salvage Archaeology Field School #1	Luxor	January 5, 2008	March 27, 2008	19	7	26
Salvage Archaeology at the Historic Mound north of Luxor Temple (Cycle 5)	Salvage Archaeology Field School #2	Luxor	January 9, 2010	March 15, 2010	25	7	32
Analysis and Publication Field School #5 (Cycle 5)	ARCE Field School for SCA Inspectors	Giza Plateau	March 20, 2010	May 13, 2010	21	8	29
Luxor Study Analysis Field School (Cycle 3)	Salvage Archaeology Field School #3	Luxor	April 9, 2011	June 3, 2011	8	6	14

**TRAINING COMPLETED SINCE PROJECT INCEPTION**  
**Egyptian Antiquities Conservation Project**  
**Cooperative Agreement No. 263-A-00-04-00018-00**

Course Title	Subproject Name	Location	Start Date	End Date	No. of Males	No. of Females	Total Participants
Registrations and Collections Management Department (RCMD) Protocol	Egyptian Museum Registrars Training Project	Egyptian Museum, Cairo	August 1, 2006	January 31, 2011	1	9	10
VI European Registrars Conference	Egyptian Museum Registrars Training Project	Basel, Switzerland	November 9, 2008	November 12, 2008	0	4	4
International Registrars Symposium	Egyptian Museum Registrars Training Project	Chicago, IL (USA)	November 5, 2009	November 9, 2009	0	3	3
EAC Conservation School for Architectural Conservators – Season #1	Luxor Groundwater Lowering Response Project	Luxor	September 1 2007	April 30, 2008	10	14	24
EAC Conservation School for Architectural Conservators – Season #2	Luxor Groundwater Lowering Response Project	Luxor	September 1, 2008	April 30, 2009	10	16	26
EAC Conservation School for Architectural Conservators – Season #3	Luxor Groundwater Lowering Response Project	Luxor	October 1, 2009	April 30, 2010	13	13	26
EAC Conservation School for Architectural Conservators – Season #4	Luxor Groundwater Lowering Response Project	Luxor	October 1, 2010	April 30, 2011	27	27	54
EAC Advanced Conservation Training for Architectural Conservators – Season #5	Luxor Groundwater Lowering Response Project	Luxor	October 1, 2011	April 30, 2012	15	13	28

## **APPENDIX 3**

### **Site Visits and Presentations on ARCE Projects**

#### Site Visits to ARCE/EAC Projects:

October 2010

- Visit to Historic Cairo by USAID Attorney General on October 19<sup>th</sup>, 2010
- Representatives from the ARCE Board of Governors visited Karnak and Luxor Temples on October 1, 2010

November 2010

- Visit to the Egyptian Museum Registrars' Training project by members of the USAID/Egypt Program Office on Nov. 2<sup>nd</sup>
- USAID Mission Director Jim Bever, Office Director John Irons and Project Management Specialist Sylvia Atalla visited Medinet Habu and Luxor Temple on November 8<sup>th</sup>. Emphasis was placed on the groundwater damage and the groundwater lowering program.

December 2010

- Jeff Novak, ARCE Membership Coordinator, visited Luxor on December 2<sup>nd</sup> through the 4<sup>th</sup>.
- Jim Bever, USAID Egypt Director, visited the Karnak Pump Station and discharge point, and our work at Khonsu Temple and Mut Temple on December 26<sup>th</sup>.
- Leslie Bromberg, ARCE Tucson, Arizona member, visited the work at Khonsu on December 31<sup>st</sup>.

January 2011

- A tour group from Toledo, Ohio visited Khonsu Temple and the laboratory on January 7<sup>th</sup>.
- John Irons, USAID Egypt Office Director and Sylvia Atalla Ishak, USAID Project Management Specialist visited the Karnak Pump Station and discharge point, and our work at Khonsu Temple and Mut Temple on January 10<sup>th</sup>.
- Dr. J. Patrick Greene, Chief Executive Officer of the Museum Victoria (Melbourne, Australia) visited Khonsu Temple and the laboratory on January 12<sup>th</sup>.
- Salima Ikram, AUC Professor and ARCE member and Otto Schaden, Egyptologist working on KV10 and KV63, visited Khonsu Temple and the laboratory on January 28<sup>th</sup>.

May 2011

- A delegation from USAID visited the ARCE Projects on May 3<sup>rd</sup> and 4<sup>th</sup>. Gerry Scott was present.
- A delegation from USAID visited the ARCE Projects on May 23<sup>rd</sup>.

#### Presentations by Michael Jones on USAID-funded conservation projects:

5 August 2010: Arabic Language Students Summer School: ARCE, Cairo.

**TRAINING COMPLETED SINCE PROJECT INCEPTION  
Egyptian Antiquities Conservation Project  
Cooperative Agreement No. 263-A-00-04-00018-00**

12 September 2010: British Egyptology Congress; British Museum, London.

8 January 2011: Archaeological Institute of America Annual Meeting; San Antonio.

2 April 2011: ARCE Annual Meeting, Chicago.

7 April 2011: ARCE Chapter Memphis TN.

10 April 2011: ARCE Chapter Atlanta GA.

15 June 2011: Cairo Rotary Club; Conrad Hotel, Cairo.